

Work Order ID 150371

Wednesday, August 24, 2016 11:47:36 AM

150371

Page 1

Item ID: D2435

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bearpaw

Start Date: 8/10/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 8/24/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89Date: **AUG 29 2016**

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2435	Rev E1								

120

0.00

120

FLOW WATER JET

Waterjet

Memo

0.11

FLOW CNC Waterjet

CUT BLANK AS PER FILE D2435

4 φ as 16/09/06

130

0.05

130

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.35

HAAS CNC vertical machine #1

1-Inspect material for defects or damage prior to machining
2-Machine as per Folio FA789 and Dwg D2435 Identify as D2435
3-Deburr

4 φ 16-09-23

140

QC2- Inspect parts off machine FAI/FAIB

0.00

140

QC

Memo

0.01

Quality Control

4 φ 16-09-23

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 150371

Wednesday, August 24, 2016 11:47:36 AM

150371

Page 2

Item ID: D2435 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bearpaw
Start Date: 8/10/2016 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 8/24/2016 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC8- Inspect parts - second check	0.00							
150									
QC	Memo	0.01							
Quality Control									
151	Identify as per dwg & Stock Location: <u>St</u>	0.00							
151									
Packaging	Memo	0.01							
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.07							
Quality Control									

DAS
21
9-89

SEP 26 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



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		OTHER : ☐							

Picklist Print

Wednesday, August 24, 2016 11:47:36 AM

Work Order ID: 150371

150371

Parent Item: D2435

D2435

Parent Item Name: Bearpaw

Start Date: 8/10/2016

Required Date: 8/24/2016

Start Qty: 4.00

Required Qty: 4.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No			120	sf	157.2600	3.2	12.8			

MUHMWB10

**

see 16/09/2016

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

Location

Loc Qty

Loc Code

MAT018

157.26

m134823

14.5

m135013

142.76

13

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



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OTHER : ☐					

DART AEROSPACE LTD		Work Order:	150371
Description: Bearpaw		Part Number:	D2435
Inspection Dwg: D2435 Rev: E1		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**

 ☐ **Prototype**

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.063 x 45°	+0.030/-0.010	.062 x 45°	/		vern	
B	5.500	+/-0.030	5.502	/			
C	0.200	+/-0.030	.199	/			
D	R0.250	+/-0.030	.250	/			
E	0.250	+/-0.010	.246	/			
F	0.625	+/-0.030	.621	/			
G	0.25 x 45°	+/-0.030	.230 x 45°	/			
H	0.375	+/-0.010	.380	/			
I	19.000	+/-0.030	19.000	/			
J	0.950	+0.030/-0.010	.950	/			
K	Ø0.260	+0.005/-0.000	.260	/			
L	Ø0.930	+/-0.030	.935	/			
M	0.30	+0.030/-0.000	.309	/			
N	0.375	+/-0.030	.377	/			
O	7.375	+/-0.030	7.375	/			
P	4.250	+/-0.010	4.250	/			
Q	2.000	+/-0.030	2.000	/			
R	9.000	+/-0.010	9.000	/			
S	15.750	+/-0.030	15.750	/			

Measured by: P-1609-23	Audited by: B.A. DAS 08	Prototype Approval:	N/A
Date:	Date: 16/09/24 9-89	Date:	

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O K10007	KJ/RF	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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OTHER : _____																																												

DART**RELEASED**
98.06.17 KE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. E
CHECKED <i>KE</i>	APPROVED <i>KE</i>	DRAWING NO. D2435	SHEET 1 OF 2
DATE 98.05.19		TITLE BEARPAW	SCALE 1:5

A	96.01.24	NEW ISSUE
B	96.03.26	CHANGE BORE AND C'BORE DEPTH
C	97.05.07	CHANNEL & C'BORE DEPTH CHANGED
D	97.10.17	R1.5 BORE WAS R2.637 (TSR A469)
E	98.05.19	CHANGE C'BORE, R1.58 WAS R1.50

ENGRAVE LOGO TO MAX DEPTH OF 0.012. ENGRAVE PART AND BATCH NUMBERS TO MAX DEPTH OF 0.010. (TYPICAL LOCATION AS ILLUSTRATED)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *150371 ML*

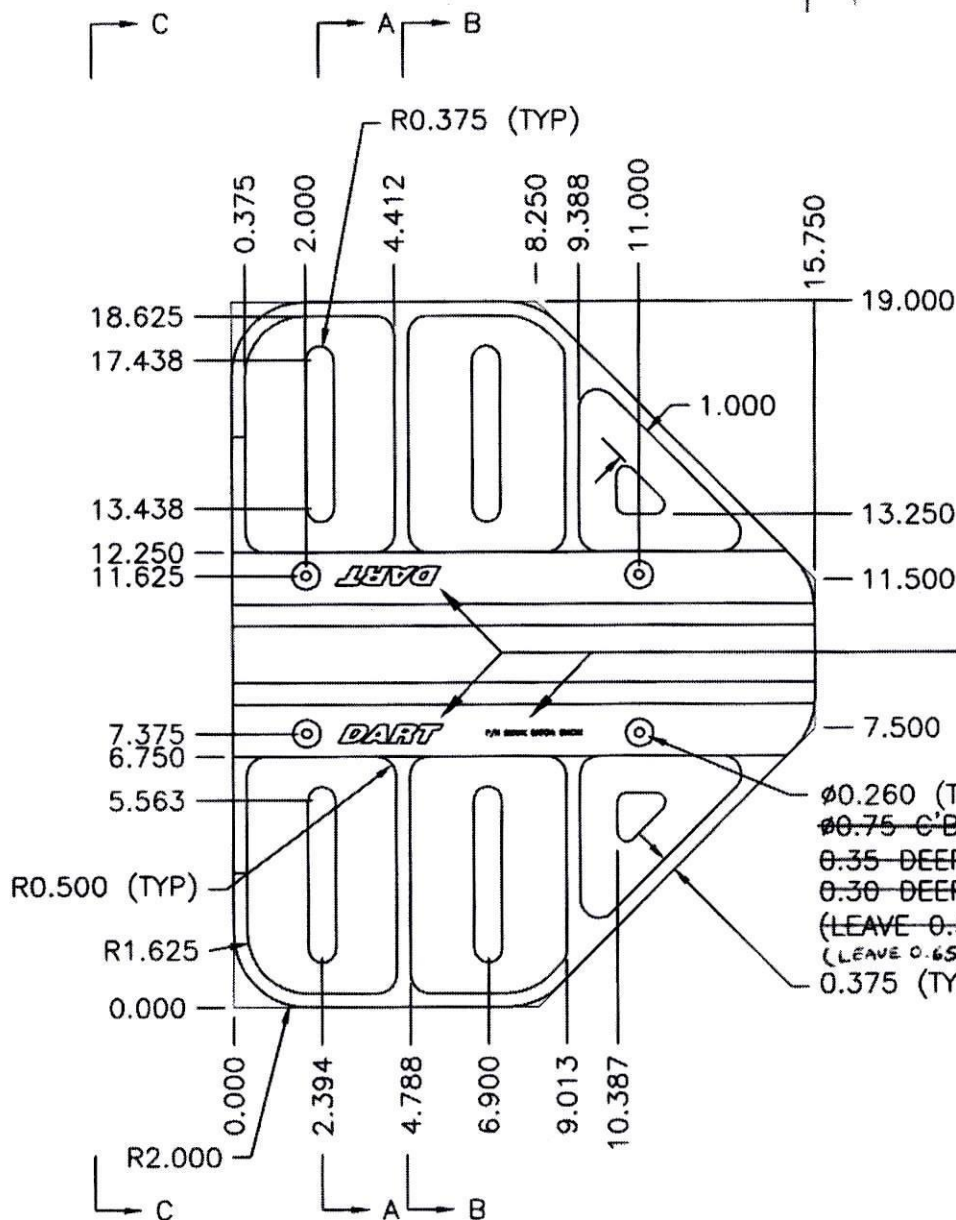
*16-08-29*

$\phi 0.260$ (TYP) $\phi 0.93$ C'BORE
 $\phi 0.75$ C'BORE 0.30 DEEP FROM BOTTOM
0.35 DEEP FROM TOP (MIN.)
0.30 DEEP FROM BOTTOM
(LEAVE 0.300 MIN.)
(LEAVE 0.650 MIN.)
0.375 (TYP)



<i>9143</i>	
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EFFECTIVE DEOS



MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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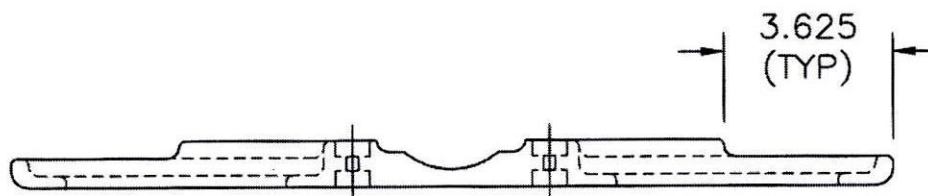
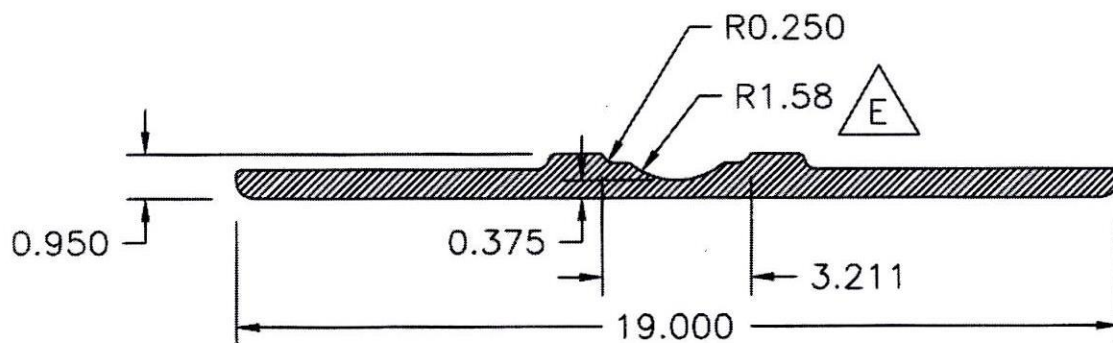
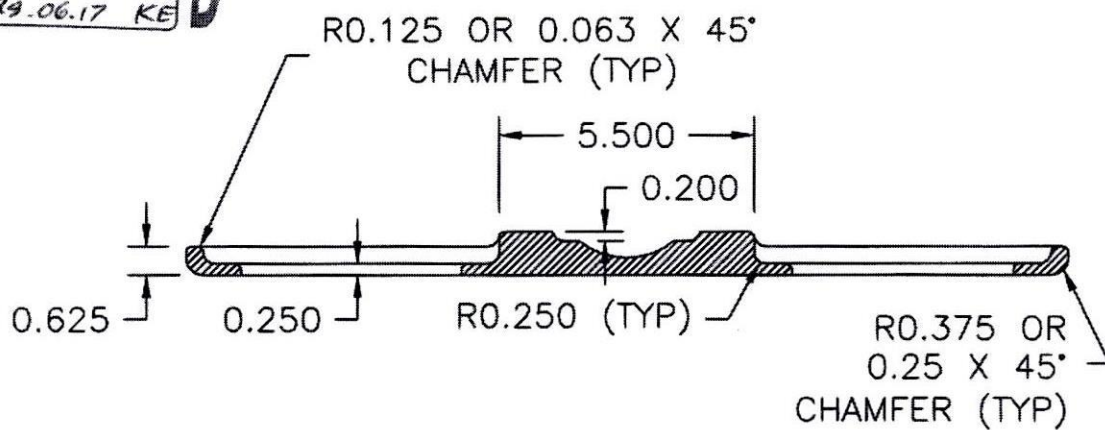
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DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED DIB	APPROVED	DRAWING NO. D2435	REV. E SHEET 2 OF 2
DATE 98.05.19		TITLE BEARPAW	SCALE 1:4

RELEASED
98.06.17 KE



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Work Order update only ☐

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